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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,451	10/16/2003	Richard J. Ernst	14303	8743
7590 04/27/2007 LISA M. SOLTIS ILLINOIS TOOL WORKS INC.			EXAMINER ·	
			EPPS, TODD MICHAEL	
3600 WEST LA GLENVIEW, I	AKE AVENUE L 60025		ART UNIT	PAPER NUMBER
,-		•	3632	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		04/27/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)					
	10/687,451	ERNST ET AL.					
Office Action Summary	Examiner	Art Unit					
·							
The MAILING DATE of this communication app	Todd M. Epps  ears on the cover sheet with the cove	3632 correspondence address					
Period for Reply		<b>,</b>					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value of the provision of the period for reply within the set or extended period for reply will, by statute, any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 12 Fe	Responsive to communication(s) filed on <u>12 February 2007</u> .						
• = -	,						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under E	:x рапе Quayle, 1935 С.D. 11, 4:	03 U.G. 213.					
Disposition of Claims							
4) Claim(s) 1,2,8,12,26 and 31-36 is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) <u>1,2,8,12,26 and 31-36</u> is/are rejected.  7) Claim(s) is/are objected to.	6)⊠ Claim(s) <u>1,2,8,12,26 and 31-36</u> is/are rejected.						
8) Claim(s) is/are objected to: 8) Claim(s) are subject to restriction and/o	r election requirement						
Application Papers							
9) The specification is objected to by the Examine							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119		, 					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau	u (PCT Rule 17.2(a)).	•					
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)	· .						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		Patent Application (PTO-152)					

Application/Control Number: 10/687,451

Art Unit: 3632

#### **DETAILED ACTION**

This is the sixth Office Action **final** (in response to February 12, 2007 amendment) for serial number 10/687,451, Rod Hanger For Securing A Rod To A Substrate, filed on October 16, 2003.

### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 8, 12, 26, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,758,465 to Logue in view of U.S. Patent No. 5,546,723 to Jones.

Logue '465 discloses a rod hanger (fig. 5) comprising a generally planar mounting portion (24) defining a perimeter edge, and having a hole (52) along extending between a top surface (40) and a bottom surface (44) with the hole extending therebetween, a generally planar rod receiving portion (34) with a top surface (42), a bottom surface (46) and a hole (60) that includes a lip formation (64) disposed thereabout, and a connecting element (36), wherein the planes of the mounting and rod receiving portions are generally parallel, wherein rod receiving portion configured for threadably receiving the rod, wherein the rod hanger defines a unitary body with generally uniform thickness, wherein the hole of the mounting portion is coincident

along the plane, has a radius and defines a circumference of 360 degrees, and wherein the mounting portion has four corners.

However, Logue '465 fails to specifically teach at least four anti-rotation elements on generally planar top surface of the mounting portion plane uniformly spaced from the hole, and wherein four anti-rotation members are configured for penetrating the substrate. Nevertheless, Jones '723 teaches a mounting portion (figs. 1a-1c) with a central hole and four anti-rotation elements (14) disposed about the hole and spaced apart from each other by about 90 degrees along the circumference of the hole and dispose proximate to each of the corners of the mounting portion, and wherein four anti-rotation members are configured for penetrating the substrate (fig. 1a). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the hanger of Logue '465 with four anti-rotation elements disposed about the hole and spaced apart from each other by about 90 degrees along the circumference of the hole and dispose proximate to each of the corners of the mounting portion as taught in Jones '723 wherein doing so would provide for superior rotation prevention means.

Furthermore, Logue '465 in view of Jones '723 disclose the previous invention failing to specifically teach four anti-rotation elements have a generally hemisphered shape. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the anti-rotation elements of

Logue '465 in view of Jones '723 to be of various shapes including hemispherical or truncated cone since it has been held that a change in shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Claims 32, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logue '465 in view of Jones '723, and further in view of U.S. Patent No. 6,677,185 to Chin et al. (Chin).

Logue '465 in view of Jones '723 fails to specifically teach wherein at least four anti-rotation members include a resilient cover, is secured by a chemical adhesive, and the resilient cover is formed of a polymer. Nevertheless, Chin '185 teaches wherein a mounting with dimples (31) and the dimples are secured by an adhesive (41') / polymer on each of them thereof. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included rod hanger of Logue '465 in view of Jones '723 with the anti-rotation elements and to include an adhesive as taught by Chin '185 wherein doing so would provide thereof for a protective coating on the anti-rotation members with a superior mounting means.

## Response to Arguments

Applicant's arguments filed February 12, 2007 (in response to the Office Action mailed on November 9, 2006) have been fully considered but they are not persuasive.

In response to applicant's argument that '423 patent in view of '723 patent is improper since the two references in combination fail to teach or suggest all of the requirements of the claim. The Examiner clearly disagrees. First of all, it was assumed that the applicant was referring the '423 patent to Logue '465 patent. Since Logue '465 fails to teach wherein the rod hanger have four hemisphere shaped anti-rotation elements mounted to a ceiling. Attention is directed to Jones '723 patent – figures 1A-1C, Jones '723 teaches a concept of how the mounting portion with four anti-rotation elements designed to mount on a wood sill or any flat surface (i.e. wall, substrate, plate..). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the rod hanger of Logue '465 to include four anti-rotation elements disposed about the hole as taught in Jones '723 wherein doing so would provide for superior rotation prevention means. Therefore, with the modification, these references teach all elements and are analogous to the applicant's invention and it doesn't teach away from the prior arts.

Furthermore, Logue '465 in view of Jones '723 disclose the previous invention failing to specifically teach four anti-rotation elements have a generally hemisphered shape. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the anti-rotation elements of Logue '465 in view of Jones '723 to be of various shapes including hemispherical or truncated cone since it has been held that a change in shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Next, in response to applicant's argument that Jones '723 reference with "gripper prongs (14)" are not anti-rotation elements configured for penetratingly engaging the substrate. The Examiner clearly disagrees. The word "anti-rotation" has been given its plain meaning: "anti" defined as serving to prevent and "rotation" defined as the action or process of rotating on (*Merriam-Webster's Collegiate Dictionary – 10<sup>th</sup> Edition*). With the reference to the office action above, the applicant will see that the above reference with Jones '723 do in fact teach such feature with anti-rotation elements for penetratingly engaging the surface to hold the mounting portion in one place.

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In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Logue '465 fails to teach wherein the rod hanger has four hemisphere shaped anti-rotation elements mounted to a ceiling. Attention is directed to Jones '723 patent – figures 1A-1C, Jones '723 teaches a concept of how the mounting portion with four anti-rotation elements designed to mount on a wood sill or any flat surface (i.e. wall, substrate, plate..).

rotation elements) and the dimples are secured by an adhesive / polymer on each of them. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included rod hanger of Logue '465 in view of Jones '723 with the anti-rotation elements and to include an adhesive as taught by Chin '185 wherein doing so would provide thereof for a protective coating on the anti-rotation members with a superior mounting means. Therefore, with the modification, these references teach all elements and are analogous to the applicant's invention and it doesn't teach away from the prior arts.

Next, applicant argues that Chin '185 reference teaches away from the required anti-rotation elements. The Examiner clearly disagrees. Attention is directed to the above Office Action, wherein Chin '185 teaches a mounting surface with dimples and the dimples are secured by an adhesive / polymer on each of them thereof. Since Chin '185 discloses a flat mounting surface with dimples inserted into the substrate, the dimples is being used to provide as anti-rotation elements, which is to prevent the movement of the mounting surface (see definition above).

Furthermore, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Again, in this

case, the motivation for the obvious rejection as stated in the office dated November 9, 2006 is as follows:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included rod hanger of Logue '465 in view of Jones '723 with the anti-rotation elements and to include an adhesive as taught by Chin '185 wherein doing so would provide thereof for a protective coating on the anti-rotation members with a superior mounting means.

At last, in response to applicant's argument that Chin '185 does not disclose a resilient cover formed of a polymer extending fully over the anti-rotation elements and which is secured to the anti-rotation element by a chemical adhesive. The Examiner clearly disagrees. First of all, it is well known in the art that an adhesive in general can be made from aqueous, which contain submicrometric particles of soft organic polymers. Therefore, the applicant will see that Chin '185 reference teaches the limitation where a resilient cover formed of a polymer extending fully over the anti-rotation elements and which is secured to the anti-rotation element by a chemical adhesive.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd M. Epps whose telephone number is 571-272-8282. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 571-272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TME

Todd M. Epps Patent Examiner Art Unit 3632 April 16, 2007 A. JOSEPH WUJCIAK III PRIMARY EXAMINER TECHNOLOGY CENTER